### PATENT COOPERATION TREATY

# Translation

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2003P07798WO	FOR FURTHER A	ER ACTION See Form PCT/IPEA/416							
International application No.	International filing dat	te (day/month/year)	Priority date (day/month/year)						
PCT/EP2004/051269	28.06.200	4	10.07.2003						
International Patent Classification (IPC) or na	tional classification and I	PC							
H04B7/26									
Applicant SIEMENS AKTIENGESELLSCHAFT									
<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>									
2. This REPORT consists of a total of	4	sheets, including	this cover sheet.						
3. This report is also accompanied by	ANNEXES, comprising:								
a. (sent to the applicant ar	d to the International Bu	reau) a total of 5	sheets, as follows:						
sheets on taining rectifications and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).									
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.									
	d Rureau anhy) a total of (	indicate type and number	of electronic carrier(s))						
o. Senio me marmatoni	i Dureau Oray) a total of (	indicate type and number							
, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).									
4. This report contains indications rela	ting to the following item	ns:							
Box No. I Basis of t	ne report								
Box No. II Priority									
Box No. III Non-estat	lishment of opinion with	regard to novelty, inventi	ve step and industrial applicability						
Box No. IV Lack of u	nity of invention								
DOX 110. V	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
Box No. VI Certain do	ocuments cited								
Box No. VII Certain de	fects in the international	application							
Box No. VIII Certain ol	Box No. VIII Certain observations on the international application								
Date of submission of the demand	-	Date of completion of this	s report						
Name and mailing address of the IPEA/EP		Authorized officer							
Foorimile No.		Tolonhono No							

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/051269

Box	No. I		Basis of the report	<u></u>	· · · · · · · · · · · · · · · · · · ·		
1.			o the language, this report is based on the internation er this item.	nal application in the language in	which it was filed, unless otherwise		
			port is based on translations from the original langua; s the language of a translation furnished for the purpo		,		
			nternational search (Rule 12.3 and 23.1(b))				
		□ P	ublication of the international application (Rule 12.4)				
		ir	nternational preliminary examination (Rule 55.2 and/	or 55.3)			
2.	recei	iving Off report): the inte	to the elements of the international application, this lice in response to an invitation under Article 14 are transfer application as originally filed/furnished cription:				
	الاستكا		•				
		pages	1-3,5-17	. 11 42 4 4 5	as originally filed/furnished 10.02.2005 with letter		
		pages*	4,4a		of 10.02.2005		
	<b>N</b> 2	pages*		received by this Authority on			
	M	the clai	ms:				
		nos.			as originally filed/furnished		
		nos.*			with any statement) under Article 19 10.02.2005 with letter		
		nos.*	1-12		of 10.02.2005		
		nos.*		received by this Authority on	-		
	M	the drav	wings:				
		sheets	1/4-4/4		as originally filed/furnished		
		sheets*		received by this Authority on			
		sheets*		received by this Authority on			
		a seque	nce listing and/or any related table(s) - see Supplement	ental Box Relating to Sequence Li	isting.		
3.		The am	endments have resulted in the cancellation of:				
		u	ne description, pages				
		ti	ne claims, nos.				
		ti	the drawings, sheets/figs				
		U ti	he sequence listing (specify):				
		□ a	ny table(s) related to sequence listing (specify):				
4.			port has been established as if (some of) the amend we been considered to go beyond the disclosure as fil				
			ne description, pages				
			he claims, nos.				
			he drawings, sheets/figs				
			the sequence listing (specify):				
			ny table(s) related to sequence listing (specify):				
*	If ite		lies, some or all of those sheets may be marked "supe	rseded."			

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/051269

Box			rticle 35(2) with regard to novelty, inventive step or industrial applicability; pporting such statement	
1.	Statement			
	Novelty (N)	Claims	1-12	YES
		Claims		NO
	Inventive step (IS)	Claims	1-12	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-12	YES
		Claims		NO
l				

### 2. Citations and explanations (Rule 70.7)

### 1. Technical field

The invention relates to a method for synchronising a wireless communication system divided up into wireless cells.

### 2. Problem\_addressed

The object is to design a cellular wireless communication system that offers subscribers optimum wireless coverage with both high and low volumes of traffic while ensuring minimum co-channel interference.

### 3. Solution

If the number of mobile stations exceeds a specified threshold value, a second synchronisation method is used whereby the mobile stations receive signals from base stations in their own wireless cell as well as from neighbouring base stations. The base station signals are used to determine a time synchronisation value and a frequency synchronisation value to which the mobile station then synchronises itself.

### Advantage

There is no need to transmit high-precision reference

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

signals to the mobile station because each mobile station is synchronised to a received average value for all the received base stations. This releases additional wireless transmission resources that can be used to handle user data transmissions.

### 4. Prior art

WO-A-00/35117 (document D2) is considered to be the closest prior art, and forms the basis of the preamble of claim 1. The aforementioned solution is not obvious even from a combination of the teachings of documents D2 and D1 (US-A-5 872 774).

### 5. PCT Article 41(2)

Claim 1 is based on claims 1 and 2 in the original application.